

Sir Henry Johnson took great interest in birds and became a member of the Union and the Club, the dinners of which he occasionally attended, but he did not, so far as we are aware, make any original contributions to ornithology.

GEORGE HOGARTH DAWSON.

We regret to record the death of Mr. G. H. Dawson, which occurred very suddenly on 12 October, 1917, in London.

Born in 1845, he was a member of Lloyds and was head of the firm of Dawson Brothers. He was a keen sportsman and a good polo player, but had to relinquish the game owing to a severe accident. He was also an enthusiastic fox-hunter and rode with the Essex hounds for 59 seasons. After his accident at polo he continued to hunt, riding on a lady's side-saddle, as he was unable to sit on an ordinary cross-saddle.

He was keenly interested in bird-life and a good observer, and was elected a member of the Union in 1915.

We also regret to have to record the recent death of Prof. Martorelli of the Civic Museum at Milan, a Foreign Member of the B. O. U. since 1903. We hope to publish a notice of his ornithological activities in the next number of 'The Ibis.'

XVIII.—*Notices of recent Ornithological Publications.*

Andrews on Fossil Birds from Glastonbury.

[Report on the remains of Birds found in the Glastonbury Lake Village. By C. W. Andrews. Extract from "The Glastonbury Lake Village," by A. Bulleid and H. St. George Gray, vol. ii. pp. 632-637, fig. 179, 1917. 4to.]

This is a reprint of an article previously published by the author in 'The Ibis' for 1899 (pp. 351-358) with some additional notices of bones found since that date, at the

Glastonbury lake-village. No additional species are recorded.

The most interesting bird recognized among the remains is the Crested Pelican (*Pelecanus crispus*), of which large numbers of bones have been collected, and which not improbably bred there and was used as food by the inhabitants. It is not known at the present time in western Europe, but is now found from the lower Danube regions eastwards to India. Some of the bones are figured.

Beebe on Guiana Birds.

[Tropical wild-life in British Guiana. Zoological contributions from the Tropical Research Station of the New York Zoological Society. By William Beebe, Directing Curator; G. Inness Hartley, Research Associate; and Paul G. Howes, Research-Assistant. With an Introduction by Colonel Theodore Roosevelt. Vol. i. pp. 1-504; 143 plates and figures. New York (New York Zoological Society), 1917. 8vo.]

Under the auspices of the New York Zoological Society, Captain Beebe, M.B.O.U. (for he now holds a commission in the Aviation Service of the American Army), has recently established a research station at Bartica in the interior of British Guiana for conducting investigations into tropical biology.

The present volume, which was briefly alluded to in the January number of 'The Ibis' (p. 187), contains the first results obtained during a sojourn of some six months of 1916 at this delectable spot. Situated at the junction of two magnificent rivers, the Essequibo and the Cuyuni, with untouched and almost untrodden aboriginal forest within a mile of the house where the station is placed, it is an ideal spot for a naturalist. There is no doubt that far better results in the matter of collection and observation can be obtained by working from a fixed centre, and that this is so is clearly proved by the present volume.

The first six chapters are introductory in character, and tell us something of the history of the district and of previous workers in Guiana, also of the general plan of the observations carried on at the research station.

Then follows lists of birds with their colonial and Indian names, and of the methods pursued to obtain an insight into their habits. In the space of five months, within a rectangle of clearing and jungle measuring two miles by half a mile, Captain Beebe and his companions became acquainted with two hundred and eighty-one species of birds. Unlike many previous naturalists he was astonished at the wealth and abundance of both individuals and species in the primæval forest. He has a good deal to say on variation in the roosting habit, on mixed bird-parties, on protection by coloration, and on the fact that he never found butterflies in the stomachs examined, and many other similar problems. A special chapter is devoted to the Hoatzin (*Opisthocomus*) which, however, is not met with at Bartica, but on the Berbice River in another part of the Colony. The young of this ancient form is quadrumanous, using its wings, which are clawed, as well as its legs for climbing about in the bushes in which it is hatched, and, if driven to it, diving into the water and swimming freely and well.

Another chapter is devoted to the Tinamous, one genus of which (*Tinamus*) has the hinder aspect of the tarsus roughened, the scales forming a series of corrugations; while the other genus (*Crypturus*) has the tarsus quite smooth. Captain Beebe discovered that this fact is explained by the habits of the birds: *Tinamus major* roosts in trees, sitting lengthwise on the branch and resting on its tarsi; while *Crypturus soui* roosts on the ground.

Up to now no definite account of the breeding-habits of any species of Toucan has been given to the world. Captain Beebe and his assistants found five species of these birds at Kalacoon, and between March 15 and May 10 obtained evidence of the breeding of all five, and secured both eggs and young birds. The eggs are laid in a hole in a tree, and often an old Woodpecker's hole is made use of. They are, in the case of *Rhamphastos monilis*, two in number, white in colour, and shaped like a diminutive hen's egg.

In the case of another species, *Pteroglossus aracari*, young birds were obtained—remarkable-looking youngsters, with well-developed heel-pads on which they rest, and move about refusing to make use of their feet and toes.

Many other interesting discoveries are recounted, and suggestions for the solution of many curious problems connected with tropical bird-life are made by Captain Beebe and Mr. Hartley in this fascinating volume; while the third author, Mr. Howes, has devoted himself entirely to entomological problems. The work is profusely illustrated with reproductions of photographs and drawings, and our only quarrel with it is its great weight, due to the use of heavy paper; but we can strongly recommend it to all our readers who are interested in the problems of tropical bird-life.

Chapman on Colombian Birds.

[The Distribution of Bird-life in Colombia; a contribution to a biological survey of South America. By Frank M. Chapman. Bull. Amer. Mus. N. H. xxxvi. 1917, pp. x+729, 41 pls., 21 text-figs.]

The United States of Colombia, formerly known as New Granada, is the northernmost of the South American Republics, and is probably for its size the richest of all the countries of the world for the variety and abundance of its bird-life. Mr. Chapman estimates that there are about 1700 species and subspecies of birds recorded from Colombia. Up to quite recently our knowledge of this rich avifauna was almost entirely based on native-made "Bogotá" skins, which are made primarily for export for millinery purposes.

A few collectors such as Claude Wyatt (*cf.* *Ibis*, 1871, p. 113), T. K. Salmon (*cf.* P. L. Selater & Salvin, *P. Z. S.* 1879, p. 486), and F. Simons, who collected in the Santa Marta region in 1878-9 for Messrs. Godman & Salvin (*cf.* *Ibis*, 1879, p. 196, and 1880, p. 114), had made a beginning of the exploration of the riches of these regions, and their collections have now all found a home in the Natural History Museum in London. In 1910 the American

Museum began a series of systematic expeditions to various parts of the Colombia. They continued for five years, and were carried out under the direction of Mr. Chapman, who himself visited the country on two occasions—in 1910-11, when he explored the Cauca valley, and in 1913 when he collected in the Bogotá neighbourhood.

The results of the study of the collections amassed during these five years are presented to us in the stout volume before us with an amount of detail and elaboration never previously attempted.

After a historical introduction and a succinct account of the routes traversed by the eight collecting expeditions, a most valuable and novel analysis of the life-zones and faunal areas of Colombia is worked out. North of Ecuador the Andes is split into three ranges by the two parallel valleys of the rivers Cauca and Magdalena, and while the western or Pacific coast is a region of great humidity, there are other regions, such as that round Cattagone and at the mouth of the Magdalena river on the Caribbean sea, which are excessively arid.

Mr. Chapman divides Colombia for distributional purposes into three "zones" according to their altitude, and the zones are again divided into "faunas" or faunal areas, of which there are five in the tropical and two in the subtropical. The tropical zone extends from sea-level to 4500-6000 ft., the subtropical from 4500-6000 ft. to 9000-9500 ft., the temperate from 9000-9500 ft. to 11,000-13,000 ft., the Paramo from 11,000-13,000 to snow-line (15,000 ft.). The distinctness of the faunas and floras of these various zones was a constant source of surprise and a most delightful experience to the author when ascending the various ranges, and some eighty pages, which are devoted to an exposition of the demarcation and the origins of the faunas of the different zones and faunal regions, form perhaps the most fascinating portion of the volume.

The second half of the work consists of a distributional list of the species and subspecies met with, with the usual

taxonomic and zoogeographical comments. These number 1285 out of about 1700 known to inhabit Colombia. Twenty-two new species and one hundred and fifty new subspecies have been described in the course of the work, mostly in previous numbers of the Bulletin of the American Museum. Eleven new forms belonging to the following genera are here described for the first time:—*Zenaida*, *Phæthornis*, *Helianthea*, *Vestipedes*, *Brachygalba*, *Pittasoma*, *Grallaria*, *Troglodytes*, *Henicorhina*, *Cyclaris*, *Pseudochloris*.

The volume is adorned with reproductions of a large number of photographs of scenery, mostly taken by Mr. Chapman himself. These illustrate the different life-zones and faunal regions. There are also many maps to show the distribution of various species, two coloured maps of the distribution of the forests and of the life-zones and faunal regions, as well as one large general map. Finally, four coloured plates of new birds from the talented brush of Mr. L. A. Fuertes, who himself accompanied two of the expeditions, embellish the volume.

We can only conclude this notice by offering our most sincere congratulations to Mr. Chapman on the completion of this splendid piece of work, and to wish that he may be able to continue his explorations on the same lines in other parts of South America.

Evans on the Isle of May.

[Early references to the Bird-life of the Isle of May. By William Evans, F.R.S.E., M.B.O.U. Scot. Nat. 1918, pp. 49-52.]

This short paper contains a number of quotations from the earlier authors in regard to the birds of the Isle of May, and is to a certain extent supplementary or complementary to that of Miss Baxter and Miss Rintoul in the present number of 'The Ibis' (pp. 247-250).

They commence with an extract from the accounts of the King's treasurer in the reign of James IV. in 1508, and finish with a note of the late Mr. E. T. Booth's visit in 1874.

Grinnell and Storer on a new Fox-Sparrow.

[A new race of Fox-Sparrow from the vicinity of Mono Lake, California. By Joseph Grinnell and Tracy I. Storer. Condor, xix. 1917, pp. 165-166.]

The authors of this note add another subspecies of Fox-Sparrow to the eight already recognized in the Check-List. The new race (*Passerella iliaca monoensis*) breeds on the eastern side of the Sierra Nevada in Mono county, California, and is intermediate as regards the size of its bill (the principal distinguishing character of the races) between *P. i. megarhyncha* of the Yosemite valley and *P. i. schistacea* of the Great Basin region of Nevada.

Hartert's recent papers.

[On the Crested Larks of the Nile Valley. By Dr. Ernst Hartert. Nov. Zool. Tring, xxiv. 1917, pp. 439-441.

Notes on Pheasants. Id. *ibid.* pp. 442-452.]

The subspecies of *Cyanopica cyanus*. Id. *ibid.* p. 493.]

In the first of these short papers Dr. Hartert makes some corrections to the account he gave of the Crested Larks of Egypt in the Vög. pal. Fauna, and also controverts some of the conclusions more recently published by Messrs. Nicoll and Bonhote. Dr. Hartert now recognizes the following:—

Galerida cristata nigricans Brehm. From the Nile delta.

G. c. maculata Brehm. Nile valley from Cairo to Wadi Halfa.

G. c. altirostris Brehm. Nile valley from Wadi Halfa to Atbara.

G. c. isabellina Bp. Atbara to the Blue and White Niles.

The second paper contains a number of taxonomic notes on various forms of the "True Pheasants," which Dr. Hartert, in opposition to the views of the Russian naturalists, Messrs. Buturlin, Alpheraki, and Bianchi, regards as all subspecies of *P. colchicus*. This is followed by a list of these subspecies, thirty-two in number, commencing with

the true *P. c. colchicus*, found on the eastern shores of the Black Sea, and ending with *P. c. satscheuensis* Pleske of Kansu. The Japanese *P. versicolor* is allowed specific rank.

In the third note is described a new form of Blue Pie, *Cyanopica cyanus interposita*, from Corea and Tsinling in Manchuria, allied to the Japanese form.

Murphy on the Colorado Desert.

[Natural History observations from the Mexican portion of the Colorado Desert: with a Note on the Lower Californian Pronghorn and a List of Birds. By Robert Cushman Murphy. Abstr. Proc. Linn. Soc. New York, nos. 24-25, 1917, pp. 43-101; 1 map & 5 plates of photos.]

The first portion of this paper deals with the author's journey in 1915 into the interesting portion of the Colorado Desert lying between the Mexican-United States boundary-line and the head of the Gulf of California, probably the driest and most completely desert-area of the North American continent. Some remarks follow on the zonal and associational status of the region, and the previous work of Grinnell in the more northern portion of the area in the southern parts of California and Arizona are in the main confirmed.

The chief object of the expedition was the collection of examples of a distinct form of Pronghorn (*Antilocapra americana peninsularis*) for the Brooklyn Museum, a task in which only a moderate success was achieved. The collecting of birds was a secondary object, but a list containing the names of 134 species is given, partly based on those collected by Mr. Murphy, partly on a collection made by Mr. S. N. Rhoads some years previously.

Murphy on a new Albatross.

[A new Albatross from the west coast of South America. By Robert Cushman Murphy. Bull. Amer. Mus. N. H. xxxvii. 1917, pp. 861-864; 1 text-fig.]

The Albatross for which Mr. Murphy proposes to form a new subgenus was taken about forty miles off the coast of

Chile: it was collected by Mr. R. H. Beck, and is now in the Brewster-Sanford collection. It is named *Diomedea (Rhothonia) sanfordi*, subgen. et sp. nov.

The character on which Mr. Murphy founds his new subgenus is the shape of the tubular nostril, which is bulging and rotund when viewed from in front, while that of *Diomedea* proper is compressed and oval. The plumage of the new form is remarkable for the absence of all bars or vermiculations.

Lord Rothschild at a recent meeting of the B. O. C. (Bull. B. O. C. xxxviii. p. 39), commenting on Mr. Murphy's new form, states that he believes it is identical with *D. chionoptera* of Kerguelen and Australia. We may also refer Mr. Murphy to the note on p. 64 of the Rev. Fr. d'Orn. for last year, alluded to on p. 330 of the present number.

Oudemans on the Dodo.

[Dodo-Studiën naar aanleiding van de vondst van een gevelsteen met Dodo-beeld van 1561 te Vere. Dor Dr. A. C. Oudemans. Verhandl. Kon. Akad. Wet. Amsterdam, 2^e Sect. xix. no. 4, 1917, pp. 1-140; 15 pls.]

Dr. Oudemans has sent us the following account of his studies on the Dodo, which have recently been published by the Royal Academy of Sciences of Amsterdam, and which we think will be of interest to our readers.

It was in August 1909 that I visited the "ville morte" Vere in the Province of Zeeland, and that I saw there a gable-stone, known to everyone in Vere and to every traveller who has been there; the house is named "In den Struys" (In the Ostrich), or "het Schotsche huis" (the Scottish house). On the gable-stone is engraved a large-billed, thick-necked, short-winged, plume-tailed, thick-legged bird. Though no ornithologist, I immediately recognized the Dodo. But the most remarkable fact is, that the stone bears the date 1561; this is 40 years anterior to the oldest known representation of that extinct bird.

This discovery induced me to make a study of all what has

been published in the 16th and 17th centuries about the Dodo, in print as well as the representations in books, pictures, and paintings. In doing so I came across many facts hitherto neglected, and on these I was able to draw conclusions, which throw a new light upon all kinds of matters. The mass of facts increased in such a manner that I presented my results to the *Koninklijke Akademie van Wetenschappen* (Royal Academy of Sciences) at Amsterdam.

First, then, Dr. Killermann of Regensburg found in 1912, in a beautiful parchment codex at Florence, a figure of the Dodo, which shows so much conformity with that on the gable-stone, that I conclude that both the makers of them had before them a bird of the same species, of the same sex, in the same stage of development, and in the same position.

Secondly, the figure of the Dodo on the frontispiece of de Bry's *Variorum Navigationes*, 1601, agrees in all respects so exactly with that which Killermann found in the parchment codex at Florence, that these two figures must be copies of one original drawing that illustrates one of the many manuscript journals of Van Neck's voyage (1598-1599). Most probably this manuscript is still in Florence.

Professor Millies, of the University of Utrecht, discovered in 1864 in the Library there a figure of the Dodo. It is a pen-and-ink drawing by the well-known painter Van de Venne of 1626. This drawing has so much agreement with the Dodo in the picture by de Hondcoeter at Berlin, that both must have been taken from the living Dodo, that was shown in Amsterdam in 1626.

The relation of Willem van West Zanen of 1648 is illustrated by a plate, divided in three horizontal sections; in the middle one we see seamen killing penguins. In the letterpress Willem tells us of the killing of Dodos, and the editor Soeteboom, who illustrated the volume, adds:—"haar afbeeltsel is in de vorige Plaat" [her (*i. e.* the Dodo's) representation is in the foregoing Plate]. Now, both Strickland, 1848, and Millies, 1868, remark that on the plate there are represented penguins, not Dodos. Not only these two writers, but also all the later ornithologists have overlooked

the fact, that in reality the killing of the Dodo is represented, namely, in the left half of the lower horizontal section ! The figure is very small, and therefore it must have escaped the attention of the investigators.

There is a communication in De Bry, 1601, that the Dutchmen brought a living Dodo home. Later this tale has been doubted. The representation of a Dodo, discovered by Von Frauenfeld, 1868, in Vienna and attributed to Joris Hoefnagel, is estimated variously to be of 1610 and 1626. But we now know, by the recent researches of art critics, that Hoefnagel died in August 1600 at Prague, where he worked at the court of Rudolf II., who possessed there—like the larger one in Vienna—a small “zoological garden.” Consequently the Dodo must have arrived there between July 1599 (when five ships reached Amsterdam) and August 1600. At Prague there is still preserved a large portion of the skull of that Dodo.

Roelandt Savery has immortalized at least eight different Dodos on his paintings ; these are scattered over the whole of Europe. Where did he paint them ? Where did those Dodos live ? Noll, 1889, boldly and without any grounds, tells us they were all painted at Vienna from one individual, that lived there. At present we know that Savery’s paintings representing Dodos were all made in or after 1626, and that he lived from 1619 up to the time of his death in 1639 at Utrecht. Consequently those paintings were made in Utrecht, or, if not in that town, then still in the Netherlands, from Dodos which lived there (*e. g.* Flushing, Vere, Rotterdam, Amsterdam, or even in The Hague, for here also was a little menagerie).

Cauche described (1651) a Dodo under the name of “oiseau de Nazaret.” The whereabouts of this islet was for centuries unknown. But on certain old Portuguese maps the “Ilha do Nazaret” is found mapped in the position of an island now called “Tromelin,” lying to the north of Mauritius.

In my work I have also made a list of representations (figures, engravings, pictures, etc.) of the Dodo, 125 in

number, all of which I have examined. I have by this means sometimes come across some curiosities, as, for instance, the Dodo in the picture by Franz Francken, 1581-1642, must have been added to it after his death by another artist in or after 1666.

Blumenbach, 1799, as well as Brandt, 1847, give their own drawings of the Dodo, both based on ancient pictures as well as on the cast of the head in the Oxford Museum. Unfortunately this skull wants the characteristic horn-sheaths, so that their drawings are wrong.

Von Hayek gives, in his *Handbuch der Zoologie*, a figure of a Dodo. In the lower left corner you will observe a fictitious monogram of Roelandt Savery: R and S crossing each other, and under the figure the inscription, "Nach Savery's Bild in Wien."—The one and the other are wrong, for Savery's monogram and his picture in Vienna are quite different, and, moreover, Hayek's figure is for the greater part a copy of Brandt's drawing of 1847, amended by himself in the wing, the region of the rump and the tail after Edwards's reproduction of the picture of Roelandt Savery in the British Museum!

As to the Common Dodo (*Raphus cucullatus* L.) the males and females differ widely in colour and in ornaments. The males are light bluish-grey with a plume-like tail, which gradually passes into a rich dress in the region of the sub-caudal coverts and circumanal feathers. The females are blackish-brown, with a brown breast and an almost globular tail like that of the Ostrich.

In the nuptial dress the Dodos remained from March to September, and in this period they were extremely fat; on the other hand, from September up to March they had a more erect carriage, as is represented on the gable-stone—meagre, long-legged, with outstretched neck.

The figure of Clusius (1605) shows the bird during its moult. Between these three states we find, of course, portrayed all kinds of intermediate stages. I have at present in my collection 85 reproductions taken from 38 originals, showing these stages.

The high degree of corpulency caused a temporary paralysis of the muscles which held up the wings; therefore we find invariably on all the drawings, representing the Dodo in its fat period, the wings hanging down; on the contrary, the Dodos in the meagre period hold their wing firmly pressed against the body, with the remiges directed backward. In the fat period the tail-vertebræ are turned up towards the head, so that the ball of tail-plumes seemed to lay on the bird's back (the tail-plumes, however, themselves preserved the original direction, *i. e.* backwards).

Relatively the young Dodo has a short bill without transverse ridges; the older the bird, the more ridges and the longer the bill.

How many Dodos reached Europe? At least fifteen, of which nine came to the Netherlands, three to England, probably one to Belgium, and presumably one to Italy.

As is well known, the White Dodo (*Apterornis solitarius* Selys) inhabited the isle of Mascarenhas (Bourbon). In this species, too, I have been able to prove that the males and females differed widely with respect to their colours and ornaments.—In the males the horny sheath of the upper mandible was hooked and sharp; its distal end was black, its proximal half was yellow with transverse black stripes; the rest of the bill was white; the head and neck were reddish brown, abruptly passing into a cream-coloured breast and gradually becoming yellowish further back; a few down-feathers were scattered over the head, and a ball-shaped tail of Ostrich-like feathers gradually passed into the subcaudal coverts and circumanal feathers.

In the females the horn-sheath of the upper mandible was not hooked, but obtuse, sometimes ending in a blunt point, sometimes rounded; it was greyish or light fawn-coloured, the rest of the bill being greyish or greenish; the whole body is cloth-white, with golden wings. The tail consisted of at least six white rectrices, which resembled in shape those of a Silver Pheasant.

After the pairing-time, during the months September to March, both sexes lost their colours and ornaments; they

were then dirty yellowish or dirty white, thin, high-legged, with extended thick neck.

In this case also the high degree of fatness weakened the muscles of the wing, so that they hung down; in the thin period the wings were pressed against the body and the remiges directed backward.

The young White Dodo had a short bill, the older bird a more elongated one.

In the "Museum Boymans" at Rotterdam there is preserved a water-colour sketch by Cornelis Saftleven, representing the head and neck of an adult male White Dodo in breeding-dress. This has enabled me to settle that the Dodo of Goemare, in the possession of the Duke of Northumberland, is an adult male White Dodo, but already losing its breeding characteristics. And as this Dodo has—according to Richard Owen—the same colours as that of the Oxford picture painted by Jan Savery, so this Dodo is most probably also a male White Dodo.

The White Dodo differs from the Common Dodo also by the long slack remiges. On these grounds I believe the Dodo of Hoefnagel is a young male White Dodo.

In addition to the two drawings of the female White Dodo by Pieter Withoos, which have long been known, I succeeded in discovering two others by Pieter Holsteyn Sr.

The third kind of Dodo is the better known Solitaire of Rodriguez (*Pezophaps solitarius* Gmel.).

I have endeavoured to point out that these three species of Dodo have several characters in common, both external and ethological: they form a peculiar group of the *Columbæ*, or *Columbiformes*, with reptilian characters.

The first volume of this account of my studies on the Dodo has already appeared, and can be obtained from the booksellers; and I am hoping to issue a second volume, for the publication of which I have obtained help from the Teyler Fund at Haarlem. This will contain a number of additional facts and discoveries in regard to these very curious and interesting extinct birds.

Robinson on Malayan Birds.

[On a Collection of Birds from Pulau Langkawi and other islands on the north-west coast of the Malay Peninsula. By Herbert C. Robinson. J. Fed. Malay States Museums, vii. 1917, pp. 129-191.]

These islands, the fauna of which has recently been investigated by Mr. Robinson and his colleague Mr. Seimund, lie off the western coast of the Malay Peninsula to the north of Penang between the parallels of 6° N. and 7° 30' N. The avifauna is characterized by the absence or scarcity of those birds which frequent the forest and which belong to such families as the Timeliidæ or Eurylæmidæ. As the visit took place in the winter months a good many migratory Flycatchers, Thrushes, and Warblers were obtained, as well as many Waders. Altogether examples of 112 species and subspecies were obtained, one of which, a Trogon, is described as new, *Pyrotrogon oreskios uniformis*. An example of the large Stork, *Xenorhynchus asiaticus*, only previously obtained in the Malay Peninsula by Cantor many years ago, was taken. Field-notes and, in many cases, taxonomic discussions accompany the list of species.

Shufeldt on fossil Birds from Florida.

[Fossil Birds found at Vero, Florida: with descriptions of new species. By R. Shufeldt. Ninth Ann. Rep. Florida State Geol. Surv. 1917, pp. 35-42; 2 pls.]

A number of fossil bird-bones found in some beds on the western or Atlantic coast of Florida, of supposed Pleistocene age, have been recently referred to Dr. Shufeldt for examination. Among them is a right humerus on which he finds a new Teal, *Querquedula floridana*, a tibio-tarsus on which he finds *Ardea sellardsi*, sp. n., and a metacarpus which is described as *Larus vero*, sp. n. Other bones are referred to genera or species still living in North America, and all are figured from photographs taken by the author.

Swarth and Bryant on Californian Geese.

[A study of the races of the White-fronted Goose (*Anser albifrons*) occurring in California. By H. S. Swarth and H. C. Bryant. Univ. Cal. Publ. Zool. xvii. 1917, pp. 209-222; pl. 13, 2 text-figs.]

It has been pointed out to Messrs. Swarth and Bryant by Judge Henshaw and other Californian sportsmen that two forms of White-fronted Goose occur in California in winter, a larger and a smaller race.

The authors have examined a considerable number of specimens both in the flesh and in skin, and have satisfied themselves that this is the case. The larger and rather scarcer bird with a wing of 420-475 mm. has a darker head and neck and 18 tail-feathers in the male and 16 in the female, the edge of the eyelid is yellow causing the appearance of a yellow eye-ring.

The smaller and commoner bird, with a wing of 381-422 mm., has a paler head and neck, 16 tail-feathers in both sexes, and the edge of the eyelid greyish brown.

Messrs. Swarth and Bryant believe that the smaller bird is *Anser albifrons albifrons*, the Palæarctic form of the White-fronted Goose, and that its breeding-range extends across Behring Straits into western Alaska, and that farther east its place is taken by the larger bird (*A. a. gambeli*), which breeds throughout the rest of Arctic America.

If this is so, and the authors' careful investigations appear to point to this conclusion, the occurrence of *A. a. albifrons* in the New World is an entirely novel fact, but it must be remembered that so far the authors have only been able to examine Californian material, and have had no opportunity of seeing any European or other North American breeding or winter-killed specimens.

Austral Avian Record.

[The Austral Avian Record. Vol. iii, nos. 1-5. June 1915-Dec. 1917.]

Since the outbreak of the war Mr. G. M. Mathews's journal has not appeared so frequently, but we have received

five numbers since we last noticed it, and we will briefly summarize their contents. The first article by the editor is accompanied by an exact reproduction of the Watling drawing, made in 1790, on which Latham founded his *Columba pallida*. This was identified by Gould with the Cuckoo since generally known as *Cacomantis pallida*, and, though doubts have been cast on this identification since by Hartert and Sharpe, Mr. Mathews believes that Gould's original identification is correct and must be accepted. Another Watling drawing is also reproduced on which Latham founded his *Certhia atricapilla*. This bird, obviously a Honey-eater, is called *Melithreptus atricapillus* in Mr. Mathews's last List. The synonymy and identification are here discussed.

Of bibliographical papers one is by Messrs. Mathew and Iredale on Levrault's 'Dictionnaire des Science Naturelles,' published between 1816 and 1830 at Paris. The articles on birds were by C. Dumont, and according to Messrs. Mathew and Iredale recognition of the names used by him involves several changes in current literature. Another paper of similar nature by the same authors deals with Boddaert's 'Tables des Planches Enluminées.'

Among some drawings now in the possession of Mr. Godman, made by a Mr. George Raper at the end of the eighteenth century on Lord Howe Island, is one of a now extinct and undescribed Fruit-Pigeon, believed by Mr. Mathews to be distantly allied to the New Caledonian *Phænorhina*. He proposes to call it *Raperia godmanæ*, after the artist and Mrs. Godman.

In the fourth number are some biographical details of Silvester Diggles, a good naturalist and observer who lived in Queensland from 1854 to his death in 1880. He published a work called 'Ornithology of Australia' in parts between 1866 and 1870. Of this Mr. Mathews gives a bibliographical account, and the article is accompanied by a portrait of Diggles himself.

Some confusion has been caused by Latham's assertion that his Sea-Eagle, which is undoubtedly *Haliaëtus albicilla*,

a species confined to the northern hemisphere, was met with at Botany Island by Capt. Cook, as evidenced by one of the Watling drawings. This Botany Island has been supposed by both Sharpe and Mathews to be an island in Botany Bay, New South Wales. In a note in the fifth number of this journal M. Brasil points out that the Botany Island is undoubtedly a small islet off the southern coast of New Caledonia where Capt. Cook landed from the 'Resolution,' and where one of his officers shot a bird called by Capt. Cook *Falco haliaëtus*. The bird was undoubtedly an Osprey, one of the forms of *Pandion haliaëtus* and not the Sea-Eagle.

Several portions of the "Additions and Corrections to the 1913 List of Australian Birds" are scattered through the five numbers here noticed. These contain descriptions, or perhaps one might say indications, of many new genera and subspecies; finally, two good coloured plates of *Nesomalurus leucopterus* and *Diaphorillas carteri* illustrate an article on these two long-lost birds recently re-discovered by Mr. Tom Carter on Dirk Hartog Island in Western Australia (see also Ibis, 1917, pp. 593, 599).

Bird Notes.

[Bird Notes. The Journal of the Foreign Bird Club. Edited by Wesley T. Page. Vol. viii. nos. 1-12. Jan.-Dec. 1917.]

The last volume of 'Bird Notes,' chiefly through the energy of the editor, Mr. Wesley Page, seems to retain the full vigour of pre-war days, though we notice the absence of any coloured plates in the present issue. This is compensated to a great extent by, may we say, the discovery of a new bird-artist, Mrs. B. M. Cooke, who has illustrated several of the articles with some very charming and characteristic pictures, which are reproduced in black and white. Mrs. Cooke, who is a member of the Bird Club and no doubt herself an aviculturist, has provided these drawings without charge to the magazine. We are specially fascinated by her four sketches of Cuvier's

Toucan, illustrating an article on these birds by the Editor and Mrs. C. F. Leach.

It is difficult to understand how aviculturists have managed to keep their aviaries full in these trying times, but Mr. Page appears to have been able to arrange for the private importation of a number of Indian birds consigned to him by Mr. E. W. Harper, and a series of articles deals with those species which have already reached this country and have been distributed among members of the Foreign Bird Club and the Avicultural Society.

The indefatigable Dr. Hopkinson has commenced a series of articles on the African Whydabs with their English and scientific synonymy and their avicultural history, which will no doubt be of the greatest assistance to those who keep living examples of these attractive birds.

Mr. H. Whitley writes on his success in getting the Sulphur-crested Cockatoo (*Cacatua galerita*) to breed for the first time in this country "in a state of controlled liberty," and has been awarded the Club's medal.

There are many other articles of interest to members of the Club from the pens of Miss Chaloner, the Marquis of Tavistock, Mr. W. Shore Baily, Mr. H. E. Bright, and the Editor; while Lieut. F. Dawson-Smith and Dr. N. S. Lucas send accounts of their experiences of bird-life at the western front.

Finally, we regret to see the announcement of the death of Lt.-Col. G. A. Perreau, a frequent contributor to the pages of this journal as well as to the 'Avicultural Magazine.' He was killed in action during the attack on Bagdad in March 1917.

The Condor.

[The Condor. A Magazine of Western Ornithology. Vol. xix. for 1917; 6 nos.]

The present volume of the 'Condor' is devoted almost entirely to the bird-life of western America, but it contains a number of articles that should interest and instruct even those of us who dwell elsewhere.

Mr. Hanna, who has for some time past devoted himself to the elucidation of the nesting-habits of the White-throated Swift (*Aëronautes melanoleucus*), believes that under certain circumstances this species, which is supposed to go south in winter, hibernates in the crevices of the cliffs where it nests. He gives certain evidence to support his statement, which, if proved, is of great interest, as it revives a belief widely held in former days even in regard to the Swallow in England.

The effects of a great hurricane which devastated Corpus Christi, a town on the coast of the Gulf of Mexico, is related by Mr. R. A. Sell. It chiefly affected the Pelicans and Purple Gallinules, which were destroyed in hundreds.

Mr. Oberholser contributes a review of the Blue Jays of the genus *Aphelocoma*, and solves a problem which has long puzzled taxonomists. Two forms of the group, *A. cyanotis* and *A. texana*, were supposed to occur side by side in Texas. This Mr. Oberholser shows is not the case, and the individuals supposed to be referable to the first-named species are in reality the latter in fresh plumage. In another contribution the same writer describes a new subspecies of the Yellow-throated Warbler, *Geothlypis beldingi goldmani*, from the central part of the peninsula of Lower California. It differs from the typical form found in the extreme south of the same peninsula in its much paler coloration.

One of the earliest scientific travellers to visit California was the Italian Dr. P. E. Botta (1802-1870), who spent a year in the State in 1827 and 1828. Mr. T. S. Palmer gives some account of this naturalist and archæologist. Some of the birds he obtained were afterwards described by Lesson, while his name is commemorated in *Saxicola bottæ*, which was named after him by Bonaparte, but which came from Abyssinia, not California.

The Osprey (*Pandion haliaëtus carolinensis*) is far from uncommon in the Yellowstone Park, and Mr. M. P. Skinner, who estimates that about a hundred and twenty pairs bred there regularly, gives a very fine photograph of a pinnacle rock, on the summit of which a pair of these birds have

their nest. They arrive from the south in April, and some interesting details of their life-history are given in a short paper accompanying the photograph. In another article he describes the White Pelicans which also breed in the Yellowstone, but in this case the nests are found together with those of the California Gull (*Larus californicus*) on two small flat islands at the southern end of Yellowstone Lake.

Other articles of interest in the present volume are by Mrs. Bailey on the birds of the humid coast region of Oregon, by Mr. H. J. Rust on the birds of Idaho, by Messrs. H. E. Hansen and W. A. Squires on the birds of San Francisco country, where great changes have taken place owing to the growth of the city of San Francisco, which now numbers half a million people.

Mention of several more papers which have been received as "separates" have already been made in previous numbers of 'The Ibis.'

Irish Naturalist.

[The Irish Naturalist. Vol. xxvi. nos. 1-12, 1917.]

The 'Irish Naturalist' for last year contains comparatively few articles of interest to ornithologists. There seems to be a lack of Irish naturalists interested in birds, and a somewhat sarcastic essay by Mr. R. Southern on "The State of Ireland" seems to confirm this.

Turning now gratefully to what there is of interest to bird-lovers in the pages of our contemporary, we have a good article by Mr. C. B. Moffat on the effect of the cold winter of 1916-17, and especially of a great snowstorm on 26 January, 1917, on bird-life in Wexford. This storm appears to have fallen most heavily on a diagonal belt across Ireland from north-west to south-east from Co. Mayo to Co. Waterford, and in Co. Wexford the depth of snow was over fifteen inches. Mr. Moffat believes that so far as his county was concerned the Stonechat, Gold-crested Wren, Long-tailed Tit, Grey Wagtail, and Meadow-Pipit were exterminated, while the Song-Thrush was much reduced in

numbers. On the other hand the Irish Dipper, the Irish Coal-Tit, and the Irish Jay, all indigenous forms, appear to have hardly suffered at all.

A complementary account of the effects of the winter in Co. Down is given by Mr. N. H. Foster in the succeeding number. Here the winter though severe was not exceptionally so, and extermination was not so noticeable, though there was a great scarcity of Fieldfares; the Stonechat, Gold-crest and Long-tailed Tit also suffered severely, but not the Grey Wagtail and the Meadow-Pipit. It would be interesting to compare these observations with those brought together at a recent meeting of the B. O. C. (Bull. B. O. C. xxxviii. p. 20).

A second paper by Mr. Foster deals with the sizes and weights of birds' eggs, the latter of the shells when blown.

A short article by Mr. Moffat deals with the arrival dates of some Irish migrants and discusses the question whether the forward or backward condition of the spring affects these dates; and Mr. J. P. Burkitt has some field-notes on the nesting and other habits of the Long eared Owl which seem to bring out some novel points.

A number of short notices by Prof. C. J. Patten and others on occurrences of rare birds at lighthouses and elsewhere are of some interest, though nothing very novel appears to have transpired during 1917.

Revue Française d'Ornithologie.

[*Revue Française d'Ornithologie, scientifique et pratique.* 9 Année; Nos. 93-104. Jan.-Dec. 1917.]

The French Ornithological Journal, under the able guidance of M. Menegaux, deals with ornithology, not only in its scientific, but also from a popular and economic aspect. From the latter point of view, we find an article in the present volume by M. Ch. Rivière dealing with the domestication and farming of the Ostrich in Madagascar, while the Editor himself puts in a plea for either Kerguelen or the Crozet Islands, both of which groups are in the

Indian Ocean and under French protection, to be made a national preserve and park for Antarctic bird-life.

M. Menegaux also writes on a collection of birds made by M. Mocquerys in the Brazilian State of Matto Grosso consisting of representatives of 85 species, and Drs. Bouet and Millet-Horsin conclude their account of the birds of the Ivory coast of French West Africa.

In a little note on p. 64 will be found an important "ringing result." An example of *Diomedea chionopectera*, ringed 21 December, 1913, by M. Lorauchet at Kerguelen, was captured by Captain Libouban of the sailing-ship 'A. D. Bordes' on 19 December, 1916, off Cape Horn, proving that sometimes at least Albatrosses traverse immense distances. From Kerguelen to Cape Horn must be at least 8000 miles.

M. Coursimault completes his enumeration of the singing-birds of Vendome with their notes reduced to a musical scale, which has been running through several volumes; M. R. Deschiens sends a contribution to the study of the local distribution of shore and coast birds, grouping them according to their habits of life; M. E. Anfrie has prepared a list of colour-variations and abnormal specimens among the examples preserved in his large collection; and, finally, M. Brasil corrects a former statement of his in regard to the generic name of the Madagascar Sun-Bittern which he formerly believed to be *Mesites* Isid. Geoffr. St. Hil., April 1838. It has now been pointed out to him by Dr. F. A. Bather that this name is preoccupied by *Mesites* Schönherr, January 1838, proposed for a genus of Weevils, and that the correct generic name for the Sun-Bittern is *Mesœnas* Reichenbach 1850.

The Scottish Naturalist.

[The Scottish Naturalist. A Monthly Magazine devoted to Zoology. Vol. for 1917; 12 numbers.]

The principal contributors in ornithology to the 'Scottish Naturalist' of the past year are undoubtedly the Misses Baxter and Rintoul. The whole of the July-August

number, consisting of over 50 pages, is devoted to their "Report on Scottish Ornithology in 1916." It follows the lines of previous reports, which have now been issued since 1913, and is a most useful and business-like compilation. Notwithstanding the difficulties of travel and of access to particular areas, a large number of observations have been made and sent in to the authors. No actually new birds are recorded for Scotland, but a female Pied Wheatear, *Enanthe leucomela* of the B. O. U. list, was taken on Swona, Orkney, the second record for the British Isles; while an example of the Siberian Chiffchaff, *Phylloscopus tristis*, hardly known beyond the Orkneys and Shetland, was taken at the Little Ross Lighthouse, Kirkeudbrightshire, on December 3. It had never previously been noticed so far south. Other sections of this report deal with ringing results, plumage-variations, breeding and migration notes; these last include a monthly calendar of weather and movements, and another section where the species are treated of individually.

Another article by the same ladies deals with the autumn display of various British birds. Much has been written on spring display and courting, but little is recorded about these habits at other times of the year. Misses Rintoul and Baxter have noticed that Ducks seem much given to autumnal antics, and have noticed the same in the case of the Missel-Thrush and Meadow-Pipit. Another question discussed by Misses Rintoul and Baxter is that of the pale and dark-breasted forms of the Brent Goose which occur in Scotland in winter. Are they two races or subspecies, or are they dimorphic forms of the same race? Contributions to this discussion from Mr. Abel Chapman, Mr. Wm. Evans, and Mr. J. G. Millais are given; and while Mr. Chapman states that both forms are found in mixed packs in winter, Mr. Millais states that the dark and light-breasted forms occur separately and in different localities, and are not found in the same flock. There can be little doubt that the pale-breasted form, at one time supposed to be exclusively American in origin, breeds in Spitzbergen and

Kolguev alongside the darker-breasted form, and we feel that the relationship of the two forms to each other and to the supposed American Brent are still by no means clear.

Mr. Eagle Clarke writes an interesting account of the wild life in the deer-forest of Corroar in western Inverness-shire, where he has spent several summers. The forest consists of 2700 acres, and has ten mountain-summits within its borders. Mr. Clarke defines the life-zones as alpine at 2000 to 3000 feet, and subalpine between the 2000 and 1000 feet contour-lines, with large lakes and much woodland, and a valley zone below 1000 feet. The characteristic birds and mammals of each are described; those of the alpine zone are the Golden Eagle, Raven, Ptarmigan, and Golden Plover.

From Mr. W. Berry we have an eloquent plea for a chair of economic ornithology at one of our Universities, and from Mr. H. Boase a detailed account of the life-history of the Coot as observed in Perthshire.

Yearbook of the Dutch Bird-Club.

[Club van Nederlandsche Vogelkundigen. Jaarbericht, no. 7, pp. 1-103. Deventer (Kluwer), 1917.]

The frontispiece of this year's report is a portrait of Hermanus Hendricus ter Meer (1838-1917), who was for many years the chief taxidermist of the Leyden Museum. His father and grandfather occupied the same post, and his son was also for some time employed in the Museum. The Editor and President of the Club, Baron Snouckaert van Schauburg, contributes his annual report on Dutch Ornithology in 1916-17, but there does not seem to have been many occurrences of special interest. He also writes on several changes in the names of Dutch birds which seem to be inevitable; on the distribution of a Glossy Starling (*Coccycolius iris*) of West Africa and of the distribution and races of the Yellow Wagtail.

Mr. W. C. van Heurn writes a comparative account of bird-life in the Dutch tropical colonies with reference to Surinam in the west and Sumatra and Java in the

east; and, finally, there are some good photographs from the life reproduced, especially one of an Arctic Tern flying down to her nest containing two eggs, taken by Mr. T. van Schilfgaarde on the island of Rottum off the extreme northern part of the Dutch coast.

List of other Ornithological Publications received.

- CLARKE, W. E. Wild life in a West Highland Deer Forest. (Scottish Nat., Nov., Dec. 1917, and Jan. 1918.)
- DESPOTT, G. Ornithological Notes for the Maltese Islands. (Jan.-June, 1917.)
- GRINNELL, J. The Status of the White-winged Petrels of the California Coast. (Condor, 1918, p. 46.)
- GRINNELL, J. The Niche-relationships of the California Thrasher. (Auk, 1917, pp. 427-433.)
- LEWIS, J. C. Some considerations on Sight in Birds. (Smithsonian Report, 1916, pp. 337-345.)
- MATHEWS, G. M. The Birds of Australia. (Vol. vii. pt. 1. London, 1918.)
- SWARTH, H. S. Notes on some Birds from Central Arizona. (Condor, 1918, pp. 20-24.)
- SWARTH, H. S. The Pacific Coast Jays of the Genus *Aphelocoma*. (Univ. Cal. Publ. Zool. vol. xvii. pp. 405-422.)
- THEOBALD, F. V., and MCGOWAN, W. Reports on the Food of the Rook, Starling, and Chaffinch. (Suppl. Journal Board Agriculture. London, May 1916.)
- THORBURN, A. British Birds; Supplementary Part, with 2 Plates in colour. (London, 1918.)
- WHITE, Capt. S. A. In the Far North-east: a Scientific Expedition. (Adelaide, 1917.)
- Auk. (Vol. xxxv. No. 1, 1918.)
- Avicultural Magazine. (Third Series, Vol. ix. Nos. 3-5, 1918.)
- Bird-Lore. (Vol. xix. No. 6, 1917; Vol. xx. No. 1, 1918.)
- Bird Notes. (Third Series, Vol. i. Nos. 1-3, 1918.)
- British Birds. (Vol. xi. Nos. 8-10, 1918.)
- Condor. (Vol. xx. No. 1, 1918.)
- Emu. (Vol. xvii. pt. 2, 1917.)
- El Hornero. (Vol. i. No. 1, 1917.)
- Irish Naturalist. (Vol. xxvii. Nos. 1-3, 1918.)
- Revue Française d'Ornithologie. (Nos. 105-7, 1918.)
- Scottish Naturalist. (Nos. 73-75, 1918.)
- South Australian Ornithologist. (Vol. iii. No. 4, 1917.)